

20. (New) The charging interface of claim 18, wherein the single aperture is substantially circular.
21. (New) The charging interface of claim 18, further comprising a mounting means for mounting the charging interface on a headset.

REMARKS

Claims 1-17 were considered by the Examiner. Claims 1-11 and 14-17 stand rejected by the Examiner.

The Examiner requires restriction to either invention I (claims 1-11 and 14-17) or invention II (claims 12 and 13). A provisional election was made without traverse to prosecute the invention of group I, claims 1-11 and 14-17. Applicant hereby elects without traverse to prosecute the invention of group I, claims 1-11 and 14-17. Claims 12 and 13 have been cancelled in response to the restriction requirement.

In this response, claims 1, 5, 8, and 10 have been amended. Claims 2 and 12-17 have been cancelled. Claims 18-21 have been added. Therefore, claims 1, 3-11 and 18-21 are pending.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) for failing to include the reference sign 616.

Corrected Figure 7 now includes the reference sign 616.

The drawings are objected to because they have elements shown in cross section which are not properly crosshatched.

Corrected Figure 6 now shows the cross section of element 621 cross-hatched as synthetic resin or plastic material. Such cross-hatching is illustrative only, and is not related to patentability. The illustrated cross-hatching is not intended to limit the scope of the invention or the material of element 621.

The drawings are objected to as failing to comply with 37 CFR 1.84(m).
Corrected Figures 1, 2, and 4 now do not have unnecessary shading.

Specification

The first sentence of the abstract has been amended such that the abstract now utilizes the proper language and is in the proper format.

Claim Objections

Corrections to claims 1, 5, 8, and 10 have been made to correct the informalities cited by the Examiner. Such corrections are not intended to narrow the claims and are not made for reasons related to patentability.

Rejections under 35 USC Sec. 112

Claims 2 and 8 are rejected under 35 U.S.C. 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 has been cancelled.

With respect to claim 8, in response to the 35 U.S.C. 112 rejection, the language "positive terminal" has been replaced with "first contact interface system" and "negative terminal" has been replaced with "second contact interface system". The language "to be used independently from the other" has been deleted to clarify that either the first contact interface system or the second contact interface system may transfer charging current.

Rejections under 35 U.S.C. Sec. 102

Rejections under 35 U.S.C Sec. 102(b)

Claims 1, 3-5, 9, 10, and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Bishop (U.S. Pat. No. 5,540,599).

Claim 1 as amended reads as follows:

1. (Amended) An interface for use with a portable rechargeable device comprising:
 - a first contact interface system for receiving a male connector, the first contact interface system comprising a housing with a front surface, wherein the front surface includes an aperture leading to a well within the housing, and wherein a first positive contact is disposed within the well and a first negative contact is disposed within the well; and
 - a second contact interface system comprising conductive contacts disposed on the front surface outside the aperture, wherein the conductive contacts comprise a second positive contact and a second negative contact, *wherein the aperture may receive a charging member to detent the second positive contact and the second negative contact with corresponding contacts on a charger.*

Claim 1 as amended teaches an interface for use with a portable rechargeable device comprising a first contact interface system and a second contact interface system, both using an aperture. The first contact interface system includes an aperture leading to a well within a housing, where a first positive contact and first negative contact are disposed within the well. The second contact interface system includes the aperture, which may be used by the second contact interface system to receive a charging member to detent a second positive contact and a second negative contact with corresponding contacts on a charger.

Bishop does not teach or suggest a first and second contact interface system, both of which may utilize the same aperture in a housing. Rather, Bishop discloses a fixed coaxial connector socket (18) which includes an aperture in housing (12). Bishop further discloses two

parallel rows (20 and 22) of electrical contacts (24). Bishop does not teach or suggest the use of the aperture of the fixed coaxial connector socket with the parallel rows of electrical contacts.

Thus, at least for the foregoing reasons, applicant respectfully submits that Bishop does not teach or suggest all the claimed elements of amended claim 1.

Claims 3-5, 9, and 10

Claims 3-5, 9, and 10 are dependent on claim 1. Therefore, it is respectfully submitted that claims 3-5, 9, and 10 are patentable over Bishop at least for the reasons stated above with respect to the patentability of claim 1. Accordingly, Applicant respectfully requests the withdrawal of the rejections of claims 3-5, 9, and 10.

Rejections under 35 U.S.C Sec. 102(e)

Claims 1 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Tripod (US 2003/0045174).

Claim 1 as amended teaches a first contact interface system and a second contact interface system. Claim 1 teaches a second contact interface system comprising conductive contacts disposed on the front surface outside the aperture

Tripod discloses only a first contact interface system. In the Tripod contact interface system, contacts 28 serve as terminals to connect to CRT terminals 24. As illustrated in Tripod Figure 1, CRT terminals 24 follow a path 32 to couple with contacts 28 disposed within an aperture in front surface 14 (see dotted lines in Tripod Figure 1). Tripod does not teach or disclose the coupling of conductive contacts disposed on the front surface outside the aperture. In fact, Tripod teaches away from the use of portions of contacts 28 that may appear outside the aperture. Tripod teaches that the Tripod invention allows shortening of the cabinet by shortening

the protrusion of the CRT socket board beyond the end of the neck portion of the CRT (Paragraph [0004], lines 1-3). Tripod teaches that when socket 10 is engaged with neck portion 22 by mating the parts in the direction shown by arrow 32, there is substantially no protrusion of any portion of socket board 34 beyond the end of neck portion 22 (Paragraph [0007], lines 17-21).

Thus, at least for the foregoing reasons, applicant respectfully submits that Tripod does not teach or suggest all the claimed elements of amended claim 1.

Claim 11 is dependent on claim 1. Thus it is respectfully submitted that claim 11 is patentable over Tripod at least for the reasons stated above with respect to the patentability of claim 1.

Rejections under 35 U.S.C Sec. 103(a)

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop in view of Wallo (US 3,467,940).

Claims 6 and 7 are dependent on claim 1. Thus it is respectfully submitted that claims 6 and 7 are patentable over Bishop in view of Wallo at least for the reasons stated above with respect to the patentability of claim 1. Accordingly, Applicant respectfully requests the withdrawal of the rejections of claims 6 and 7.

New Claims

New Claim 18 reads as follows:

18. (New) A charging interface for use with a headset comprising:
a housing with a front surface, wherein the front surface includes a single aperture leading to a well within the housing, and *wherein the single aperture provides access to a first charging interface disposed within the well*; and

a second charging interface comprising wiping contacts disposed on the front surface outside the aperture, *wherein the single aperture may receive a member to align and detent the conductive contacts with corresponding contacts on a charger.*

Claim 18 teaches a charging interface with a first and second charging interface. Both the first and second charging interface utilize a single aperture. The single aperture is utilized to provide access to the first charging interface disposed within the well. The single aperture is further utilized to receive a member to align and detent the conductive contacts of the second charging interface with corresponding conductive contacts on a charger.

Bishop does not teach or suggest a charging interface which utilizes a single aperture in both a first charging interface and a second charging interface. Rather, Bishop discloses a first aperture which is part of a fixed coaxial connector socket (18), and discloses a second pair of alignment apertures (28).

Thus, at least for the foregoing reasons, applicant respectfully submits that Bishop does not teach or suggest all the claimed elements of amended claim 18.

Claims 19-21

Claims 19-21 are dependent on claim 18. Thus, it is respectfully submitted that claims 19-21 are patentable for the reasons stated above with respect to the patentability of claim 18.

CONCLUSION

In view of the above amendments and remarks, allowance of the pending claims is respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment and substitute drawings. The attached page is captioned "Version with markings to show changes made".

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the specification, the abstract has been amended as follows:

The present invention provides a [solution to the needs described above through a] charging interface. The interface includes a first contact interface system for receiving a male connector. The first interface contact interface system includes a housing with a front surface, where the front surface includes an aperture leading to a well within the housing. A first positive contact is disposed within the well and a first negative contact is disposed within the well. The interface also includes a second contact interface system comprising conductive contacts disposed on the front surface outside the aperture. The conductive contacts comprise a second positive contact and a second negative contact.

Claims 1, 5, 8, and 10 have been amended as follows:

1. (Amended) An interface for use with a portable rechargeable device comprising:
a first contact interface system for receiving a male connector, the first contact interface system comprising a[n] housing with a front surface, wherein the front surface includes an aperture leading to a well within the housing, and wherein a first positive contact is disposed within the well and a first negative contact is disposed within the well; and
a second contact interface system comprising conductive contacts disposed on the front surface outside the aperture, wherein the conductive contacts comprise a second positive contact and a second negative contact, wherein the aperture receives a charging member to detent the second positive contact and the second negative contact with corresponding contacts on a charger.

5. (Amended) The interface of claim 4, wherein the aperture includes a semi-spherical surface that the member from the charger mates with to align and detent the conductive contacts on the portable device with the corresponding contacts on the charger.6.

8. (Amended) The interface of claim 1, wherein the [positive terminal] first contact interface system and the [negative terminal] second contact interface system are electrically coupled to [the] terminals of a rechargeable battery at a [the] headset and transfer charging power to the rechargeable battery, allowing either the first charging interface system or the second charging interface system to be used [independently from the other] to transfer charging current.

10. (Amended) The interface of claim 1, further comprising a mounting means for mounting the contact device on a [the] headset.

New Claims 18-21 have been added as follows:

18. (New) A charging interface for use with a headset comprising:

a housing with a front surface, wherein the front surface includes a single aperture leading to a well within the housing, and wherein the single aperture provides access to a first charging interface disposed within the well; and

a second charging interface comprising conductive contacts disposed on the front surface outside the aperture, wherein the single aperture may receive a member to align and detent the conductive contacts with corresponding contacts on the charger.

19. (New) The charging interface of claim 18, wherein the single aperture includes a semi-spherical surface that the member mates with to align and detent the conductive contacts with corresponding contacts on the charger.

20. (New) The charging interface of claim 18, wherein the single aperture is substantially circular.

21. (New) The charging interface of claim 18, further comprising a mounting means for mounting the charging interface on a headset.